

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020729**Date Inspected:** 13-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. YAN BAO JIA**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

**1. INPROCESS:**

Orthotropic Box Girder (OBG) at Bay-14 Area:

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the vertical shear plate to bottom plate weld joint located on 14W at counter weight side. The weld is designated as SEG3020BB-010. The welder is identified as 066038. ABF QA Mr. YAN BAO JIA was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2793.

ZPMC welding personnel performing Flux Core Arc Welding of Fillet welds joining the deck plate to deck panel diaphragm weld joint located on 14W. The weld is designated as DP3171-002-249. The welder is identified as 048696. ABF QA Mr. SHAO JIAN YUAN was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2132-ESAB.

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## WELDING INSPECTION REPORT

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ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the vertical shear plate to bottom plate weld joint located on 14W at counter weight side. The weld is designated as SEG3020BB-073. The welder is identified as 047864. ABF QA Mr. YAN BAO JIA was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2752.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the vertical anchor plate to bottom plate weld joint located on 14W at counter weight side. The weld is designated as SEG3020U-588. The welder is identified as 067588. ABF QA Mr. YAN BAO JIA was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-TC-U4b-FCM.

### 2. NDT:

Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 08330.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The members are identified as Tee joint between floor beam & longitudinal diaphragm weld joint located on 14E at bike path side. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were SEG3019AA-002.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pillai,Santosh	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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